AMENDMENTS TO THE CLAIMS

1. (currently amended): A method of determining total urokinase concentration in a sample containing at least one of an active or inactive form of urokinase, comprising:

generating at least one immunological composition directed against at least one of a first peptide with SEQ ID NOs: 1, 2, 3, 4, 5 [[,]] or 6[[,]] ;

generating at least one immunological composition directed against at least one of a second peptide with SEQ ID NOs: 7, 8, 9, 10, 11 or 12; and

generating at least one immunological composition directed against at least one of a third peptide with SEQ ID NOs: 13 or 14 ~~or functionally equivalent peptide(s) containing amino acid substitution(s) with a difference in the hydropathic index value of ± 1 to 2 from the corresponding first peptide, second peptide or third peptide~~;

contacting aliquots of said sample separately with each of said at least one immunological composition; and

measuring quantity and comparing type of said at least one immunological composition bound in each of said ~~sample~~ aliquots to determine a concentration of said at least one of said active or inactive form of urokinase, wherein each of said at least one immunological composition binds to said at least one of said active or inactive form of urokinase and is indicative of said concentration of the form that is bound thereto, wherein the total of said concentration of said at least one of said

active and inactive form of urokinase represents the total urokinase concentration in said sample.

Claims 2-4. (canceled).

5. (previously presented): The method of claim 1, wherein each of said at least one immunological composition has a binding affinity constant for said first peptide, said second peptide or said third peptide against which it is directed that is substantially higher than its binding affinity constant for a non-urokinase protein as similar in amino acid sequence to urokinase as is trypsin.

6. (previously presented): The method of claim 1, wherein said at least one immunological composition directed against a third peptide with SEQ ID NO: 14 exhibits a binding affinity constant for urokinase zymogen, an inactive form of urokinase, of at least 1×10^8 M^{-1} and a binding affinity constant for forms of urokinase lacking a peptide bond between amino acid residues 158 and 159 of Seq ID No. 16 of at least approximately 10-fold lower than that for urokinase zymogen.

Claims 7-8 (cancclcd).

9. (previously presented): The method of claim 1, wherein said at least one immunological composition is an antiserum, an antibody, or a supernatent of a

hybridoma obtained via injection into a mammal of said at least one first peptide, second peptide and third peptide.

10. (previously presented): The method of claim 1, wherein said determination of said quantity of each of said at least one immunological composition is carried out by radiolabeling said sample.

11. (previously presented): The method of claim 1, wherein said at least one active or inactive form of urokinase comprises:

a low molecular weight urokinase that is bound to said at least one immunological composition directed against said second peptide but is not bound to said at least one immunological composition directed against said first peptide;

a high molecular weight urokinase that is bound to said at least one immunological composition directed against said first peptide or second peptide but is not bound to said at least one immunological composition directed against said third peptide; and

a urokinase zymogen, an inactive form of urokinase that is bound to said at least one immunological composition directed against said third peptide.

Claim 12 (canceled).

13. (currently amended): A method of determining total urokinase concentration in a sample containing at least one of an active or inactive form of urokinase, comprising:

generating at least one immunological composition selected from a group of immunological compositions consisting of an antisera, an antibody and a supernatant of a hybridoma, each of said at least one immunological composition ~~each~~ obtained via injection of at least one of a first peptide with SEQ ID NOs: 1, 2, 3, 4, 5 or 6[[,]] ;

generating at least one immunological composition selected from a group of immunological compositions consisting of an antisera, an antibody and a supernatant of a hybridoma, each of said at least one immunological composition obtained via injection of at least one of a second peptide with SEQ ID NOs: 7, 8, 9, 10, 11 or 12; and

generating at least one immunological composition selected from a group of immunological compositions consisting of an antisera, an antibody and a supernatant of a hybridoma, each of said at least one immunological composition obtained via injection of at least one of a third peptide with SEQ ID NOs: 13 or 14 ~~or functionally equivalent peptide(s) containing amino acid substitutions with a difference in the hydropathic index value of ± 1 to 2 from the corresponding first peptide, second peptide or third peptide~~;

contacting aliquots of said sample separately with each of said at least one immunological composition;

measuring quantity and comparing type of each of said at least one immunological composition bound in each of said ~~sample~~ aliquot to determine a total concentration of said at least one of said active and inactive form of urokinase in said sample, wherein each of said at least one immunological composition binds to said at least one of said active or inactive forms of urokinase and is indicative of said total

concentration of the form of urokinase that is bound thereto, said determination comprising:

determining a first concentration of low molecular weight urokinase in said sample, wherein said low molecular weight urokinase is bound to said at least one immunological composition directed against said second peptide, but is not bound to said at least one immunological composition directed against said first peptide;

determining a second concentration of high molecular weight urokinase in said sample, wherein said high molecular weight urokinase is bound to said at least one immunological composition directed against said first peptide or second peptide, but is not bound to said at least one immunological composition directed against said third peptide, and

determining a third concentration of urokinase zymogen, an inactive form of urokinase, in said sample, wherein said urokinase zymogen is bound to said at least one immunological composition directed against said third peptide; and

adding the first, second and third concentrations to obtain said total concentration, wherein said total concentration represents a total urokinase concentration in said sample.

14. (currently amended): A kit for determining total urokinase concentration in a sample containing at least one of an active or inactive form of urokinase, comprising:

immunological composition(s) directed against at least one of a first peptide with SEQ ID NOs: 1, 2, 3, 4, 5, or 6[[,]] ;

immunological composition(s) directed against at least one of a second peptide with SEQ ID NOs: 7, 8, 9, 10, 11 or 12; ~~and~~

immunological composition(s) directed against at least one of a third peptide with SEQ ID NOs: 13 or 14 ~~or against functionally equivalent peptide(s) containing amino acid substitution(s) with a difference in the hydropathic index value of ± 1 to 2 from the corresponding first peptide, second peptide or third peptide~~; and

instructions for determining said total urokinase concentration in said sample by adding concentrations of said at least one of said active and inactive forms of urokinase obtained by measuring quantity and type of immunological composition(s) bound in aliquots of said sample.

Claims 15-18 (canceled).

19. (currently amended): The kit of claim 14, wherein said immunological composition(s) is further comprised of:

an immunological composition directed against a fourth peptide with SEQ ID NO: 17 ~~or against functionally equivalent peptide(s) containing amino acid substitution(s) with a difference in the hydropathic index value of ± 1 to 2 from the corresponding fourth peptide~~.

20. (previously presented): The kit of claim 14, wherein said immunological composition(s) is an antiserum, an antibody or a supernatant of a hybridoma.

Claim 21 (canceled).

22. (withdrawn): A peptide for determining total urokinase concentration in a sample as in any of Seq ID Nos. 1-15 and 17.

23. (withdrawn): An antisera obtained via injection into a mammal of a peptide for determining total urokinase concentration in a sample as in any of Seq ID Nos. 1-15 and 17.

24. (withdrawn): An antibody obtained via injection into a mammal of a peptide for determining total urokinase concentration in a sample as in any of SEQ ID Nos. 1-15 and 17.

25. (withdrawn): A hybridoma producing an antibody obtained via injection into a mammal of a peptide for determining total urokinase concentration in a sample as in any of Seq ID Nos. 1-15 and 17.

26. (withdrawn): A supernatant of a hybridoma producing an antibody obtained via injection into a mammal of a peptide for determining total urokinase concentration in a sample as in any of Seq ID Nos. 1-15 and 17.

27. (currently amended): The method of claim 1, wherein said step of generating at least one immunological composition is further comprised of generating at least one immunological composition directed against a fourth peptide with SEQ ID NO:

17 ~~or functionally equivalent peptide(s) containing amino acid substitutions with a difference in the hydropathic index value of ±1-2 from said fourth peptide~~.

28. (previously presented): The method of claim 27, wherein said at least one of said active or the inactive form of urokinase comprises a low molecular weight urokinase that is bound to said at least one of said immunological composition directed against said second peptide, but is not bound to said immunological composition directed against said fourth peptide; and a high molecular weight urokinase in the sample that is bound to said at least one immunological composition directed against said first peptide or said second peptide, but is not bound to said immunological composition directed against said third peptide.